ABSTRACT

In accordance with the invention, a data link layer tunneling technique is disclosed for improving the throughput of high speed data in a noisy wireless environment. The method for recovering lost frames transmitted between a packet sending unit and a packet receiving unit in a data communications system, and generally comprises the steps of: (a) identifying a failure to successfully receive a missed frame at the packet receiving unit; (b) establishing a logical tunnel channel at the packet receiving unit to acknowledge the next successfully received frame; (c) starting a first timer at the packet receiving unit; (c) upon receiving a tunnel establishment request from the packet receiving unit, the packet sending unit resending the missed frame on the logical tunnel channel and starting a second timer; and (d) the packet sending unit resending the missed frame a specified number of times until receiving an acknowledgement from the packet receiving unit.